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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,144

01/10/2006

Ryo Yamamoto

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EXAMINER

MARTINEZ, JOSEPH P

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/564,144

Applicant(s)

YAMAMOTO ET AL.

Examiner

Joseph Martinez

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1-10-06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is not a single paragraph as written. Correction is required. See MPEP § 608.01(b).

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Shafaat et al. (6956995).

Re claim 1, Shafaat et al. teaches for example in fig. 1-4 and 7C, an optical path converting type optical coupling element (20) characterized in that two faces (perpendicular faces at 22 and 24 or 102 and 104) approximately perpendicular to a resin molding body (fig. 1, 2 and 7C) and a total reflecting face (26, 76; col. 3, ln. 13-14; col. 4, ln. 38) approximately having an angle of 45° with respect to said two faces are formed (fig. 1, 2 and 7C), and plural lenses (22, 24, 102, 104; fig. 4) are respectively integrally arranged on said two faces (fig. 1, 2 and 4).

Re claim 2, Shafaat et al. further teaches for example in fig. 1-4 and 7C, each of said lenses (22, 24, 102, 104) is a lens for converting light incident so as to be approximately emitted from one point into parallel light (fig. 2; wherein 22 as shown collimates light from a point source and 24 is capable of converting light incident so as to be approximately emitted from one point into parallel light if the path were reversed; and furthermore, the examiner interprets fig. 2 of Shafaat et al to teach fig. 14 of the instant application and therefore teaches the claimed limitation).

Re claim 5, Shafaat et al. further teaches for example in fig. 7C, a hollow (fig. 7C; wherein the office interprets the concave portion around 102 to teach the claimed limitation) is formed in a portion of said resin molding body (col. 4, ln. 63-66) on the side opposed to said total reflecting face (76).

Allowable Subject Matter

Claims 3, 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art taken alone or in combination fails to anticipate or fairly suggest the limitations of the claims, in such a manner that a rejection under 35 USC 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in dependent claims 3, 4 and 6.

Specifically regarding claim 3, Shafaat et al. (6956995) teaches the state of the art of an optical path converting type optical coupling element.

But, Shafaat et al. fails to explicitly teach a combination of all the claimed features including a spacer having a thickness approximately equal to the focal distance of said lens if integrally projected on each of said two faces, as claimed.

Specifically regarding claim 4, Shafaat et al. (6956995) teaches the state of the art of an optical path converting type optical coupling element.

But, Shafaat et al. fails to explicitly teach a combination of all the claimed features including plural holes are opened on each of said two faces, as claimed.

Specifically regarding claim 6, Shafaat et al. (6956995) teaches the state of the art of an optical path converting type optical coupling element.

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But, Shafaat et al. fails to explicitly teach a combination of all the claimed features including the inner face of said hollow is formed in parallel with said total reflecting face, and the distance from each lens to said total reflecting face along the optical axis of each lens formed on said two faces, and the distance from the inner face of said hollow to said total reflecting face are approximately equal to each other, as claimed.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Joseph Martinez/
Patent Examiner, AU 2873
7-27-07